

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (currently amended) A method for repair of a joint comprising the steps of:

removing a portion of a bone having natural soft tissue attached thereto;

implanting an implant within the remaining bone leaving an exposed surface of the implant;

preparing a surface of the removed portion of bone to provide the surface with a surface feature to mechanically interlock with a complementary feature defined on the exposed surface of the implant; and

mechanically engaging the surface feature of the removed portion of bone with the complementary feature of the implant when the implant is within the remaining bone while the natural soft tissue is still attached to the removed portion of bone such that the complementary feature of the implant does not extend completely through the removed portion of bone.

Claim 2. (original) The method for repair of a joint according to claim 1, wherein:

the complementary feature of the implant includes a female feature; and the step of preparing a surface includes defining a male surface feature on the removed portion of bone.

Claim 3. (original) The method for repair of a joint according to claim 1, wherein the surface feature and the complementary feature define a dovetail joint.

Claim 4. (original) The method for repair of a joint according to claim 1, wherein:
the natural soft tissue is a ligament or a tendon; and
the surface feature and complementary feature are configured to maintain the ligament or tendon in tension when the removed portion of bone is mechanically engaged to the implant.

Claim 5. (original) The method for repair of a joint according to claim 4, wherein the surface feature and the complementary feature define opposing faces that diverge away from the intact attachment point of the ligament or tendon.

Claim 6. (original) The method for repair of a joint according to claim 5, wherein the surface feature and the complementary feature define a dovetail joint.

Claim 7. (original) The method for repair of a joint according to claim 1, further comprising the step of introducing bone cement between the removed portion of bone and the exposed surface implant.

Claim 8. (original) The method for repair of a joint according to claim 1, further comprising the step of providing the exposed surface of the implant with a surface configured to promote bone tissue ingrowth.

Claim 9. (original) The method for repair of a joint according to claim 1, wherein the joint is a hip joint, the removed portion of bone is the trochanter and the remaining bone is the remainder of the femur.

Claim 10. (original) The method for repair of a joint according to claim 1, further comprising the step of fixing the removed portion of bone to the implant using a mechanical fastener.

Claim 11. (original) The method for repair of a joint according to claim 10, wherein the mechanical fastener includes at least one screw configured to pass through the removed portion of bone and engage the implant.

Claim 12. (original) The method for repair of a joint according to claim 10, wherein the mechanical fastener includes at least one cerclage wire configured to encircle at least a portion of the removed portion of bone and engage the prosthesis.

Claim 13. (currently amended) An implant for repair of a joint comprising:
a stem configured for implantation within a bone of the joint; and
a head configured to replace a portion of the articulating aspect of the bone; and

a body between said head and said stem, said ~~head~~ body including a surface defining a mechanical engagement feature configured to engage a complementary feature formed in a removed portion of ~~the articulating aspect of~~ the bone.

Claim 14. (original) The implant according to claim 13, wherein the mechanical engagement feature includes diverging opposing faces.

Claim 15. (original) The implant according to claim 13, wherein the mechanical engagement feature is the female portion of a dovetail joint.

Claim 16. (currently amended) The implant according to claim 13, wherein at least a portion of said surface of said ~~head~~ body is configured for bone tissue ingrowth.

Claim 17. (currently amended) The implant according to claim 13, further comprising at least one screw and at least one screw bore defined in said surface of said ~~head~~ body, said screw sized to pass through the removed portion of bone when the removed portion is engaged to said ~~head~~ body.

Claim 18. (currently amended) The implant according to claim 13, further comprising at least one cerclage cable engaged to said implant and configured to encircle a portion of the removed portion of bone when the removed portion of bone is engaged to said ~~head~~ body.

Claim 19. (new) A method of implanting a prosthesis comprising:

- resecting a portion of a bone having natural soft tissue attached thereto;
- implanting a prosthesis within the remaining bone;
- shaping the resected portion of bone to provide a bone tissue feature configured to mate with a feature of the implant; and
- mating the bone tissue feature with the feature of the implant while the natural soft tissue is still attached to the resected portion of bone.

Claim 20. (new) The method of claim 19, wherein mating comprises:

- engaging a keystone slot on the implant with complementarily formed bone tissue of the resected portion of bone.